

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**



**M.Sc. DEGREE EXAMINATION – FOOD CHEMISTRY AND FOOD PROCESSING**

**THIRD SEMESTER – APRIL 2018**

**16PFP3ID01– FOOD BIOTECHNOLOGY**

Date: 21-04-2018

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

**Part A**

**Answer all the questions.**

10 x 2 = 20 marks

1. Write a note on Single cell protein.
2. Highlight Solid state and submerged fermentation process.
3. What is Alginate and Carrageenan?
4. What are Bio colors?
5. List the nutritional values of edible mushrooms.
6. What are nutraceuticals?
7. Give an example for a fungal enzyme used in food industry.
8. Expand USDA
9. Name any two mycotoxins
10. What is ferritin?

**Part B**

**Answer ANY EIGHT questions.**

8x5=40 marks

11. Comment Mushroom cultivation steps.
12. Write a note on Biopolymers.
13. Explain anti staling agents.
14. Discuss the role of Enzymes in baking Industries.
15. Write a note on Malt Beverages.
16. Explain the types of Sub merged fermentation process.
17. Write notes on micro algae and their nutritional benefits.
18. Give an account on phytoestrogens in food crops.
19. Write short notes on algal transgenics.
20. Briefly discuss the heavy metal contamination and pesticidal residues in foods.
21. Explain Biofortification.
22. Write briefly on cisgenic products.

**Part C**

**Answer ANY FOUR Questions.**

4x10=40 marks

23. Write a detailed note on Bioreactors and its applications in Fermentation technology.
24. Explain the role of Enzymes in Fruit juices production and stabilization.
25. Discuss the production process of Chlorella and Spirulina at the industrial scale.
26. Enumerate on edible mushrooms
27. Elaborate on the HACCP analysis.
28. Give a detailed account on the Bt Brinjal issues in India.

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